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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,560	05/24/2000	Kenneth Pawson	4191-00014	5513

26753 7590 01/20/2004

ANDRUS, SCEALES, STARKE & SAWALL, LLP  
100 EAST WISCONSIN AVENUE, SUITE 1100  
MILWAUKEE, WI 53202

EXAMINER

TRAN, HIEN THI

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/577,560

Applicant(s)

PAWSON ET AL.

Examiner

Hien Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

### *Specification*

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 9, 12, 15-17, 19, 23, 26, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 05-237397.

JP 05-237397 discloses an apparatus comprising: a housing 15 extending axially long an axis between distal opposite first and second ends, a first port 14 at said first end of the housing; a second port 21 also at said first end of the housing, one of the first and second ports being an inlet and the other of the ports being an outlet; said housing having an intermediate section between said opposite ends; said intermediate section having a cross-sectional area A1; an

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exhaust filter element 18 in the intermediate section and entirely filling the are A1 except for a smaller cut-out in the filter element having a cross-sectional area A2; said filter element having a cross-sectional area of  $A3=A1-A2$ ; a transfer tube 19 extending through said cut-out and communication with said second port; said first port communicating with said filter element 18; wherein exhaust gas flows axially through the filter element first and second sides in one direction; said first side facing the first end of the housing; said second side facing the second end of the housing; wherein the exhaust gas flows axially through the transfer tube 19 through said cut-out in the opposite axial direction (Fig. 2).

Instant claims 1-3, 5, 9, 12, 15-17, 19, 23, 26, 29 structurally read on the apparatus of JP 05-237397.

5. Claims 1-5, 9, 12, 15-19, 23, 26, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 3,942,380.

DE 3,942,380 discloses an apparatus comprising: a housing extending axially long an axis between distal opposite first and second ends, a first port 19 at said first end of the housing; a second port 16 also at said first end of the housing, one of the first and second ports being an inlet and the other of the ports being an outlet; said housing having an intermediate section between said opposite ends; said intermediate section having a cross-sectional area A1; an exhaust filter element 13 in the intermediate section and entirely filling the are A1 except for a smaller cut-out in the filter element having a cross-sectional area A2; said filter element having a cross-sectional area of  $A3=A1-A2$ ; a transfer tube 15 extending through said cut-out and communication with said second port; said first port communicating with said filter element 13; wherein exhaust gas flows axially through the filter element first and second sides in one

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direction; said first side facing the first end of the housing; said second side facing the second end of the housing; wherein the exhaust gas flows axially through the transfer tube 15 through said cut-out in the opposite axial direction (Fig. 1).

Instant claims 1-5, 9, 12, 15-19, 23, 26, 29 structurally read on the apparatus of DE 3,942,380.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. The art area applicable to the instant invention is that of catalytic filter.

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (*ESSO Research & Engineering V Kahn & Co*, 183 USPQ 582

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1974) and who is presumed to know something about the art apart from what references alone teach (*In re Bode*, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. *In re Clinton* 188 USPQ 365, 367 (CCPA 1976) and *In re Thompson* 192 USPQ 275, 277 (CCPA 1976).

9. Claims 4, 6-8, 10-11, 13-14, 18, 20-22, 24-25, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 05-237397 in view of DE 3,942,380 and EP 931,913.

The apparatus of JP 05-237397 is substantially the same as that of the instant claims, but fails to disclose different arrangement of the inlet port and outlet port, e.g. cut-out being aligned with the second port, etc..

However, DE 3,942,380 discloses provision of the cut-out being aligned with the second port. EP 931,913 discloses provision of the inlet port extending through the sidewall.

At the time of the invention was made, it would have been obvious to one having ordinary skill in the art to select an appropriate arrangement for the inlet and outlet ports, since arrange such ports in the apparatus is no more than a design choice during routine experimentation and optimization of the system thereof as evidenced by, for example DE 3,942,380 and EP 931,913, and well within the knowledge of one skilled in the art, absence showing any unexpected results. Furthermore, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Providing a removable cover in the filter is well known in the art so as to facilitate changing of the filter element therein.

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10. Claims 6-8, 10-11, 13-14, 18, 20-22, 24-25, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3,942,380 in view of JP 05-237397 or EP 931,913.

The apparatus of DE 3,942,380 is substantially the same as that of the instant claims, but fails to disclose different arrangement of the inlet port and outlet port, e.g. cut-out being aligned with the second port, etc..

However, JP 05-237397 discloses provision of the outlet port extending through the sidewall. EP 931,913 discloses provision of the inlet port extending through the sidewall.

At the time of the invention was made, it would have been obvious to one having ordinary skill in the art to select an appropriate arrangement for the inlet and outlet ports, since arrange such ports in the apparatus is no more than a design choice during routine experimentation and optimization of the system thereof as evidenced by, for example JP 05-237397 and EP 931,913, and well within the knowledge of one skilled in the art, absence showing any unexpected results. Furthermore, it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Providing a removable cover in the filter is well known in the art so as to facilitate changing of the filter element therein.

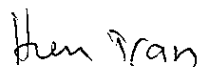
### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



HT  
January 12, 2004

**Hien Tran**  
**Primary Examiner**  
**Art Unit 1764**